

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A negative active material for a lithium secondary battery, comprising a heat-treated artificial graphite carbon material having no particular shape and an intensity ratio $I(110)/I(002)$ of an X-ray diffraction peak intensity $I(002)$ at a (002) plane to an X-ray diffraction peak intensity $I(110)$ at a (110) plane of less than 0.2, the negative active material prepared by

dissolving a coal tar pitch or a petroleum pitch in an organic solvent to remove organic-insoluble components therefrom and to obtain organic-soluble components;

heat-treating the organic-soluble components at a temperature in the range of 400 to 450 °C for 4 hours or more under an inert atmosphere to thereby produce at least 50 weight percent of mesophase particles based on the pitch;

coking the pitch including mesophase particles;

carbonizing the coked pitch;

pulverizing the carbonized pitch; and

graphitizing the pulverized pitch.

2. (Previously Amended) The negative active material of claim 1 wherein the graphite carbon material has an intensity ratio $I(110)/I(002)$ of less than 0.04.

3. (Currently Amended) A lithium secondary battery comprising:
a negative electrode comprising a negative active material;
a positive electrode comprising a lithium containing material that can reversibly intercalate and de-intercalate lithium ion; and
a non-aqueous electrolyte;
the negative active material comprising a heat-treated artificial graphite carbon material having no particular shape and an intensity ratio $I(110)/I(002)$ of an X-ray diffraction peak

~~intensity I(002) at a (002) plane to an X-ray diffraction peak intensity I(110) at a (110) plane of less than 0.2 and~~ the negative active material prepared by

dissolving a coal tar pitch or a petroleum pitch in an organic solvent to remove organic-insoluble components therefrom and to obtain organic-soluble components;

heat-treating the organic-soluble components at a temperature in the range of 400 to 450 °C for 4 hours or more under an inert atmosphere to thereby produce at least 50 weight percent of mesophase particles based on the pitch;

coking the pitch including mesophase particles;

carbonizing the coked pitch;

pulverizing the carbonized pitch; and

graphitizing the pulverized pitch.

4. (Previously Amended) The lithium secondary battery of claim 3 wherein the graphite carbon material has an intensity ratio $I(110)/I(002)$ of less than 0.04.

5. (Currently Amended) A method of preparing a negative active material having no particular shape for a lithium secondary battery, comprising the steps of:

dissolving a coal tar pitch or a petroleum pitch in an organic solvent to remove all organic-insoluble components therefrom and to obtain organic-soluble components;

heat-treating the organic-soluble components at a temperature in the range of 400 to 450 °C for 4 hours or more under an inert atmosphere to thereby produce at least 50 weight percent of mesophase particles having no particular shape based on the pitch;

coking the pitch including mesophase particles;

carbonizing the coked pitch;

pulverizing the carbonized pitch; and

graphitizing the pulverized pitch.

6. (Original) The method of claim 5 wherein the inert atmosphere is a gaseous nitrogen or argon atmosphere.

7. (Original) The method of claim 5 wherein the mesophase particles are produced by 50 to 98 weight percent based on the pitch.

8. (Original) The method of claim 5 wherein the coking step is performed at a rising temperature up to 600 °C under an inert atmosphere.